IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. - 6. (Cancel)

7. (Previously presented) A method for reducing noise associated with an audio signal received through a microphone sensor array of a game controller during game play, comprising:

detecting a target signal component and a noise signal component from at least two microphones integrated with the game controller;

enhancing the target signal component of the audio signal through a first filter;

blocking the target signal component through a second filter;

combining an output of the first filter and an output of the second filter so that noise signal component is reduced without distorting the target signal;

periodically monitoring an acoustic set-up associated with the audio signal; and

calibrating both a value of the first filter and a value of the second filter based upon the acoustic set-up so as to actively update tracking and steering toward the target signal component during game play.

8. (Original) The method of claim 7, further comprising:

defining the target signal component and a noise signal component through second order statistics.

9. (Original) The method of claim 8, further comprising:

separating the target signal component and the noise signal component; and

determining a time delay associated with each microphone sensor of the microphone senor array.

10. (Previously presented) The method of claim 7, wherein the method operation of combining the output of the first filter and the output of the second filter in a manner to reduce noise without distorting the target signal includes,

aligning the output of the second filter.

11. (Original) The method of claim 7, wherein the acoustic set-up refers to relative position of a user and the microphone sensor array.

12. (Previously presented) The method of claim 7, wherein the method operation of periodically monitoring an acoustic set-up associated with the audio signal occurs about every 100 milliseconds.

13. (Original) The method of claim 7, wherein the method operation of calibrating both a value of the first filter and a value of the second filter based upon the acoustic set-up includes,

applying a blind source separation scheme using second order statistics associated with the audio signal.

14. - 24. (Cancel)

25. (Previously presented) A system capable of isolating a target audio signal from multiple noise sources during active use, comprising:

a portable consumer device configured to move in positions that are independent from positions of a user during active use;

a computing device, the computing device including logic configured to enhance the target audio signal without constraining movement of the portable consumer device; and

a microphone array affixed to the portable consumer device, the microphone array configured to capture audio signals, wherein a listening direction associated with the microphone array is actively adjusted during active use through the logic configured to enhance the target audio signal.

26. (Previously presented) The system of claim 25, wherein the computing device is in communication within the portable consumer device.

27. (Previously presented) The system of claim 26, wherein the computing device includes,

the logic for enhancing the target signal that is executed by a first filter;

logic for blocking the target signal through a second filter;

logic for combining the output of the first filter and the output of the second filter in a manner to reduce noise without distorting the target signal;

logic for periodically monitoring an acoustic set up associated with the audio signal; and

logic for calibrating both the first filter and the second filter based upon the acoustic setup during active use of the system.

28. (Original) The system of claim 25, wherein the microphone array is configured in one of a convex geometry and a straight line geometry.

29. (Original) The system of claim 25, wherein a distance between microphones of the microphone array is about 2.5 centimeters.

30. (Original) The system of claim 25, wherein the portable consumer device is a video game controller and the computing device is a video game console.

31. (Previously presented) A system for enhancing a target audio signal, comprising:

a microphone array affixed to a video game controller, the microphone array configured to detect an audio signal that includes the target audio signal and noise;

a computing system including circuitry configured to process the audio signal when received by the microphone array of the game controller, the computing system including filtering and enhancing logic that is periodically monitored and actively calibrated to filter the noise and enhance the target audio signal as a position of the video game controller and a position of a source of the target audio signal change in position during game play, wherein the filtering of the noise includes processing a plurality of filter-and-sum operations at the computing device.

32. (Original) The video game controller of claim 31, wherein the filtering and enhancing logic includes,

separation filter logic configured to separate the target audio signal from the noise through a blind source separation scheme.

33. (Original) The video game controller of claim 32, wherein the blind source separation scheme is associated with a second order statistic derived from data corresponding to the audio signal.

34. (Previously presented) The video game controller of claim 32, wherein the separation filter logic includes,

adaptive array calibration logic to perform the periodic monitoring and calibration, the adaptive array calibration logic configured to calculate a separation filter value, the separation filter value capable of adjusting a listening direction associated with the microphone array.

35. (Previously presented) An integrated circuit, comprising:

circuitry configured to receive an audio signal from a microphone array in a multiple noise source environment, the microphone array being installed on a game controller;

circuitry configured to enhance a listening direction signal of a user handling the game controller;

circuitry configured to block the listening direction signal;

circuitry configured to combine the enhanced listening direction signal and the blocked listening direction signal to yield a noise reduced signal of the user handling the game controller; and

circuitry configured to adjust a listening direction during game play according to filters computed through an adaptive array calibration scheme,

wherein the noise reduced signal is generated using any active adjustment in the listening direction during game play.

36. (Original) The integrated circuit of claim 35, wherein the adaptive array calibration scheme applies a second order statistic to data associated with the audio signal to derive one of a signal passing filter and a blocking filter.

37. (Original) The integrated circuit of claim 35, wherein the adaptive array calibration scheme is periodically invoked.

38. (Original) The integrated circuit of claim 35, wherein the circuitry configured to combine the enhanced listening direction signal and the blocked listening direction signal to yield a noise reduced signal includes,

circuitry configured to align the enhanced listening direction signal with the blocked listening direction signal.

39. (Previously presented) The integrated circuit of claim 35, wherein the integrated circuit is contained within one or both of the game controller and a video game console.